INCH-POUND
MIL-PRF-49471/9A(CR)
30 November 2000
Superseding
MIL-PRF-49471/9(ER)
2 June 1995

PERFORMANCE SPECIFICATION SHEET

BATTERY, NON-RECHARGEABLE, LITHIUM MANGANESE DIOXIDE,
HIGH PERFORMANCE, BA-5372/U

This specification sheet is approved for use by the Communications Electronics Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-49471(CR).

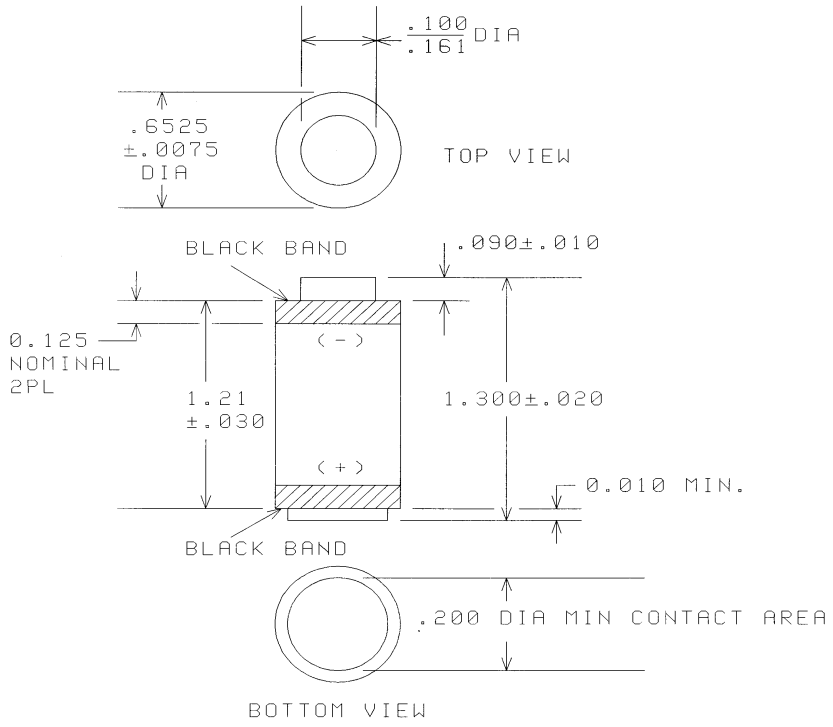

Figure 1: Battery Dimensions and terminal markings.

NOTES:

1. All dimensions are in inches.

2. Terminals are flat contact type.

REQUIREMENTS:

Dimensions and configuration: See Figure 1.

Maximum voltage: 6.80 volts under 1250 ohms.

Cut-off voltage (for capacity): 4.0 volts.

Terminals: See figure 1.

Weight (maximum): 0.7 ounces (20 grams).

Battery short circuit test: Not applicable.

High temperature protection: Not applicable.

Charge protection: Not applicable.

Complete discharge device: Not applicable.

State of Charge Indicator: Not applicable.

Positive terminal: When the battery is placed on a flat surface, positive terminal down, only the terminal shall be in contact with the flat surface. This test shall be performed during First Article on group II samples, after the visual-mechanical examinations, and during Quality Conformance Inspection group B. No failures allowed.

Capacity tests: When the battery is tested in accordance with the methods of examination and tests of this specification, the minimum capacity test requirements shall be as specified below.

Capacity Test	Minimum Capacity in Hours to 4.0 volts
I	100
L	75
H	100
HT	95
LT	60
IT	95

Initial voltage delay: When the battery is subjected to any of the capacity tests, initial closed-circuit voltages below 4.0 volts cannot exceed a 0.1 second duration.

METHOD OF EXAMINATION AND TESTS:

Capacity Tests:

(1) Storage:

Details on storage conditions for all specified capacity tests are described in basic specification.

(2) Discharge:

Cells (forced discharge): One cell shall be discharged at 4.5 milliamperes at 70±5°F to 2.0 volts. Each discharged cell shall then be connected in series to one fresh cell. Each string shall be discharged at 4.5 milliamperes at 70±5°F for 100 hours.

Batteries: Batteries shall be discharged at 4.5 milliamperes to cut-off voltage (zero volts for I test).

Forced discharge: After discharge to zero volts on the I capacity test, batteries shall be force discharged at 4.5 milliamperes for a minimum of 5 minutes.

Abuse test, predischarge: Designated samples shall be discharged at 4.5 milliamperes for 50 hours.

Abuse test, pulse discharge: Batteries shall be discharged at 5.5 milliamperes for 1 minute followed by 4 milliamperes for 4 minutes, cycled continuously to cut-off voltage.

Closed circuit voltage test:

Battery & cell string: Load resistance of 298.2 ohms shall be used. Voltage shall be above 5.0 volts within 10 seconds.

Cell: Load resistance of 150 ohms shall be used. Voltage shall be above 2.0 volts in 5 seconds.

Special marking: The following information shall be marked on each unit package:

TO TEST THIS BATTERY WITH TS-183( ) /U

USE JACK NR.	MINIMUM PERMISSIBLE VOLTAGE
12	5.0 volts

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodian:
Army – CR

Preparing Activity
Army - CR

(Project 6135-0417-09)